

WHAT IS CLAIMED IS:

1. An optical fiber collimator comprising:

a lens; and

an optical fiber chip arranged at a distance from said lens,

5 said optical fiber chip holding an end portion of an optical fiber and having an end surface treated to be inclined, wherein an optical axis of said optical fiber is eccentric with respect to a center of said lens to thereby set a quantity of eccentricity of said optical fiber so that the center of said lens substantially  
10 coincides with a center of a light beam incident on said lens from said optical fiber.

2. An optical fiber collimator according to claim 1, wherein said lens is a gradient index rod lens in which a surface facing said optical fiber chip is treated to be inclined

5 3. An optical fiber collimator according to claim 1, further comprising a cylindrical member in which said lens and said optical fiber chip are incorporated in said cylindrical member so that the center of said lens coincides with the center of said optical fiber chip in a condition that said optical fiber is inserted  
20 and held in an optical fiber insertion hole formed in an eccentric position of said optical fiber chip.

4. An optical fiber collimator according to claim 1, further comprising a cylindrical member which has a lens holding hole and an optical fiber chip holding hole formed so that the axes  
25 of said holding holes are shifted from each other, said lens

and said optical fiber chip being inserted and fixed in said holding holes respectively to thereby be incorporated in said cylindrical member so that said optical fiber chip is made eccentric with respect to the center of said lens in a condition that said optical fiber is inserted and held in an optical fiber insertion hole formed in a center of said optical fiber chip.

5 5. An optical fiber collimator comprising:

a lens having an optical axis;

an optical fiber having an optical axis and an inclined end surface; and

a holding member which holds the lens and the optical fiber so that the optical axis of the optical fiber is located at an eccentric position with respect to the optical axis of the lens.

6. An optical fiber collimator according to claim 5, wherein the holding member includes a cylindrical optical fiber chip having a center and holding the optical fiber so that the optical axis of the optical fiber is located at an eccentric position with respect to the center of the cylindrical optical fiber chip.

7. An optical fiber collimator according to claim 6, wherein the holding member further includes a cylindrical member holding the lens and the optical fiber chip so that the lens and the optical fiber chip are concentric with respect to each other.

8. An optical fiber collimator according to claim 7, wherein the lens includes a gradient index rod lens.

9. An optical fiber collimator according to claim 8, wherein

the gradient index rod lens has an inclined end surface confronted with the inclined end surface of the optical fiber.

10. An optical fiber collimator according to claim 5, wherein the holding member includes a cylindrical optical fiber chip having a center and holding the optical fiber on the center thereof, and a cylindrical member holding the lens and the optical fiber chip so that the optical axis of the lens is located at an eccentric position with respect to the center of the optical fiber chip.

11. An optical fiber collimator according to claim 10, wherein the lens includes a gradient index rod lens.

12. An optical fiber collimator according to claim 11, wherein the gradient index rod lens has an inclined end surface confronted with the inclined end surface of the optical fiber.